

PROJECT DESCRIPTION

GENERAL
THIS PROJECT INVOLVES THE MODIFICATION OF A TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 ALTERNATE (OLD NATIONAL PIKE) AND MT. PHILLIP ROAD IN FREDERICK COUNTY. US 40 ALT IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION
THE INTERSECTION WILL OPERATE IN A NEMA 6 PHASE, FULL TRAFFIC ACTUATED MODE. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR EASTBOUND AND WESTBOUND US 40 ALT. VIDEO DETECTION IS PROPOSED FOR ALL APPROACHES. NON-INVASIVE MICROLOOP SETBACK DETECTION IS PROPOSED FOR THE EASTBOUND AND WESTBOUND APPROACHES.

CONTROLLER REQUIREMENTS
A VIDEO DETECTION INTERFACE SHALL BE INSTALLED INTO THE EXISTING POLE MOUNTED CONTROLLER CABINET. SHA SIGNAL SHOP FORCES TO PERFORM INTERNAL CABINET WIRING.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon
Assistant District Engineer - Traffic
Phone: 301-624-8140

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Ms. Andrea Abend
Assistant District Engineer - Utilities
Phone: 301-624-8115

Mr. Robert Snyder
Assistant Division Chief - Traffic Operations Division
Phone: 410-787-7630

The Power Company Representative
Alleghany Power Company
1301 West Patrick Street
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Phone: 301-624-4410

Mr. Edward Rodenhizer
Team Leader - Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Team Leader - Sign Operations
Phone: 410-787-7676

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
585625	80 LF	24 INCH PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
800000	1 LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
800000	1 EA	FURNISH AND INSTALL LB CONDUIT BEND
800000	1 EA	INSTALL 90 DEGREE CONDUIT BEND IN EXISTING FOUNDATION
805115	115 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805135	20 LF	3 INCH SCHEDULE 90 RIGID PVC CONDUIT - TRENCHED
810605	2 EA	NON-INVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
811001	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813006	29 SF	RELOCATE SIGNS FROM EXISTING OVERHEAD STRUCTURES
813015	15 SF	INSTALL OVERHEAD SIGN
816001	4 EA	VIDEO DETECTION CAMERA
816005	2 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	2 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816015	1 EA	VIDEO INTERFACE EQUIPMENT
860270	6 EA	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860284	32 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861107	45 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
861108	725 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE	NONE	NONE

ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

PHASE CHART

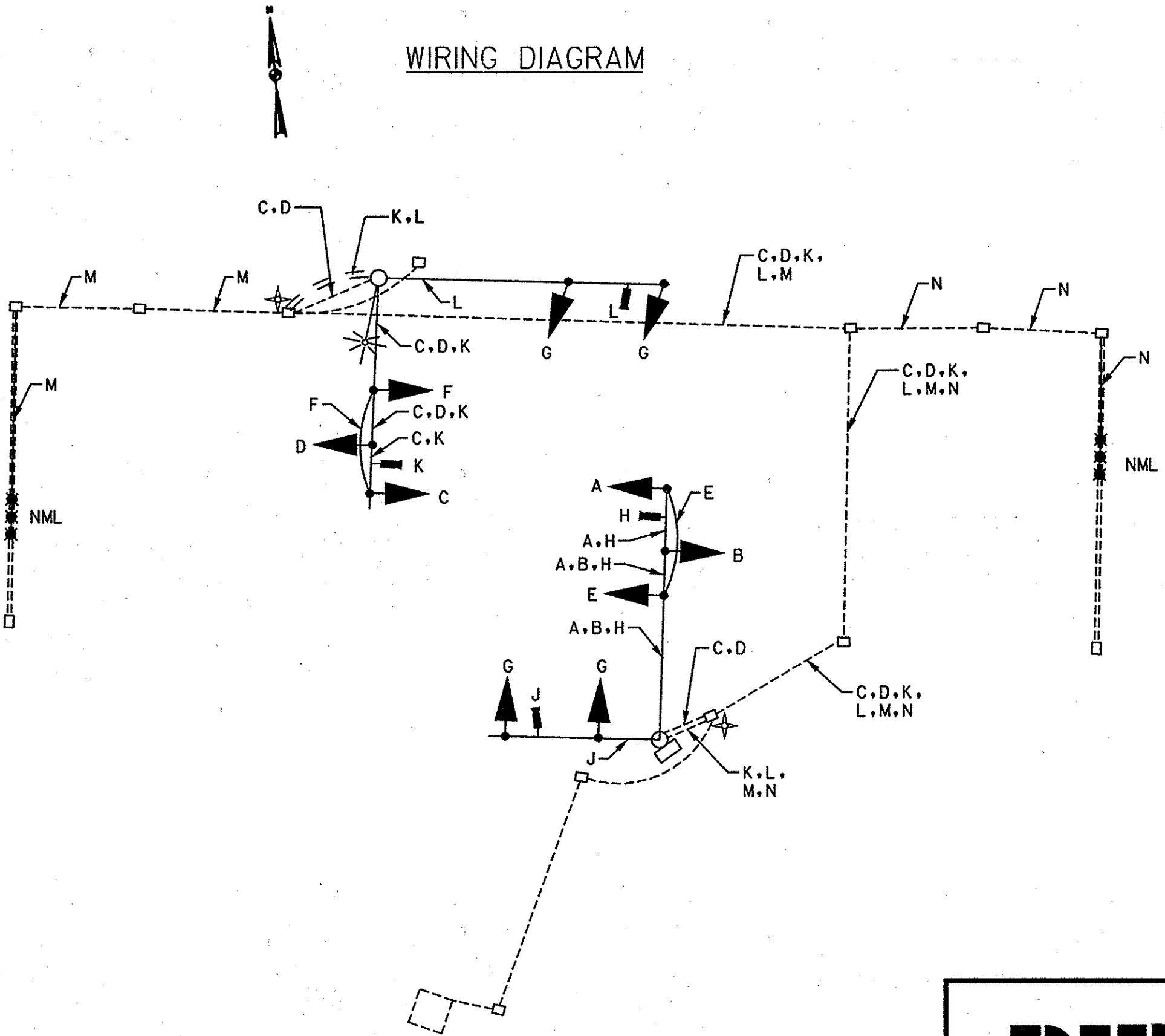
	1	2	3	4	5	6	7	8	9	10	
PHASE 1 + 5											
PHASE 1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 1 + 6, 2 + 5 OR 2 + 6										
PHASE 1 + 6											
PHASE 1 CHANGE											
PHASE 2 + 5											
PHASE 5 CHANGE											
PHASE 2 + 6											
PHASE 2 + 6 CHANGE											
PHASE 4 + 8											
PHASE 4 + 8 CHANGE											
FLASHING OPERATION											

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
973023	15 SF	SHEET ALUMINIUM MAST ARM/POLE MOUNTED SIGN -2 EACH-R3-5(L) (30 IN. x 36 IN.)

WIRING DIAGRAM



A,B,C,D - ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG.)
E,F - ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG.)
G - EXISTING CABLE TO BE UTILIZED
H,J,K,L - VIDEO DETECTION LEAD-IN CABLE
M,N - MICROLOOP PROBE LEAD-IN CABLE
NML - NON-INVASIVE MICROLOOP PROBE
Ground Rod

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 40 ALTERNATE (OLD NATIONAL PIKE) AT MT. PHILLIP ROAD

GENERAL INFORMATION

SCALE	N.T.S.	DATE	10/20/07	CONTRACT NO.	FR5025130
DESIGNED BY	P. WESTCOTT	COUNTY	FREDERICK		
DRAWN BY	P. WESTCOTT	LOGMILE	10004010.03		
CHECKED BY	J. PANNEE	TIMS NO.	1597		
FAP NO.		TOD NO.			
TS NO.3406A-GI	DRAWING				
		SHEET NO.	10	OF	10



RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

PLOTTED: Friday, October 19, 2007 AT 10:51 AM
FILE: P:\SHA\US 40 ALT\10-2007\pssg-1000_US40alt.dgn

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